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IN THE CLAIMS:

1. (Currently Amended) A component mounting apparatus for picking up electronic components supplied from a component supply section by suction nozzles attached to a mounting head and mounting the electronic components on a printed circuit board, said apparatus mounting components in ascending order of height, comprising:

a mounting head;
at least one suction nozzle attached to the mounting head; and

a control section for containing storing information on relating to the components to be mounted and for moving, based on said information, at least one of the positions of the suction nozzles, the mounting head and the printed circuit board, so that the components to be mounted are mounted in ascending order of height.

2. (Currently Amended) A component mounting apparatus for mounting components in ascending order of height, comprising:

a component supply section for supplying electronic components to be mounted;

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a mounting head having at least one suction nozzles
nozzle for picking up the electronic components from said
component supply section and mounting the electronic
components on a printed circuit board;

a data section for storing information relating to
components to be mounted;

a component mounting section for positioning and fixing
said changing positions of said at least one suction nozzle,
the mounting head and a printed circuit board; and

a control section connected to the data section and the
mounting section for controlling operations of said suction
nozzles, the mounting head and the component providing control
signals to the mounting section; and section, wherein

a data section containing information on the components
to be mounted,

wherein the positions of the suction nozzles, at least
one suction nozzle, the mounting head and the a printed
circuit board are driven and controlled so that the components
are mounted in ascending order of height based on height data
on relating to the components to be mounted, said height data
being supplied from said data section.

3. (Currently Amended) A component mounting apparatus, for mounting components in ascending order of height, comprising:

a component supply section that supplies electronic components for supplying components to be mounted;

a mounting head having a plurality of suction nozzles placed at least one suction nozzle located in a circular form pattern for picking up the electronic components from said component supply section and mounting the electronic components on a printed circuit board;

a data section for storing information relating to components to be mounted;

a component mounting section for positioning and fixing said changing positions of said at least one suction nozzle, the mounting head and a printed circuit board; and

a control section connected to the data section and the mounting section for providing control signals to said mounting section for controlling vertical movements of said suction nozzles, intermittent rotations of the mounting head and horizontal movements of the component mounting section; and section, wherein

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~~a data section containing information on the components to be mounted,~~

~~wherein the movements of the suction nozzles, at least one suction nozzle, the mounting head and the a printed circuit board are driven and controlled so that the components are mounted in ascending order of height based on height data on the relating to components to be mounted, said height data being supplied from said data section.~~

4. (Currently Amended) A component mounting apparatus for mounting components in ascending order of height, comprising:

a component supply section for supplying electronic components to be mounted;

a mounting head having at least one suction nozzles nozzle for picking up the electronic components from said component supply section and mounting the electronic components on a printed circuit board;

a data section for storing information relating to components to be mounted;

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a component mounting section for positioning and fixing
said changing positions of said at least one suction nozzle,
the mounting head and a printed circuit board; and

a control section connected to the data section and the
mounting section for providing control signals to said
mounting section for controlling vertical movements of said
suction nozzles and horizontal movements of the mounting head;
and head, wherein

a data section containing information on the components
to be mounted,

wherein the movements of the suction nozzles at least one
suction nozzle and the mounting head are driven and controlled
so that the components are mounted in ascending order of
height based on height data on the relating to components to
be mounted, said height data being supplied from said data
section.

5. (Currently Amended) The component mounting apparatus
according to claim 3, wherein the control section controls is
for controlling horizontal movements of the component mounting
section and drives and controls the driving and controlling
movements of the suction nozzles, at least one suction nozzle,

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the mounting head and the component mounting section so that the components are mounted in ascending order of height based on the height data on the relating to components to be mounted, said data being supplied from the data section.

6. (Currently Amended) A component mounting method for picking up components supplied from a component supply section by suction nozzles attached to a mounting head and mounting the components on a printed circuit board, for mounting components in ascending order of height, comprising:

providing information relating to components to be mounted; and

driving the positions of the suction nozzles attached to the mounting head, the mounting head and the printed circuit board so that the components are mounted on the a printed circuit board in ascending order of height based on said information on the components to be mounted, said information having been provided inside beforehandbefore said driving positions.

7. (Currently Amended) The component mounting method according to claim 6, wherein the target components to be mounted whose distance from other components is narrower than a predetermined value are judged to belong to a same group and the components belonging to a first group are mounted in ascending order of height within the first group.

8. (Currently Amended) The component mounting method according to claim 6, further comprising:

loading data on relating to the shape, size and mounting positions of the components to be mounted and calculating, based on said data, a distance between the mounted components;

classifying the components whose calculated inter-component distance is narrower than a predetermined value into one group;

forming another group for these components whose calculated inter-component distance is wider than the predetermined value; and

deciding the an order of mounting the components in said one group so that the components which are lower are mounted first are mounted in ascending order of height.

9. (Currently Amended) The component mounting method according to claim 6, further comprising:

classifying the components into a plurality of component groups according to the mounting positions of the such classified components and then deciding the an order of mounting the such classified components;

loading data on the shapes, sizes and mounting positions of said components to be mounted;

calculating distances between the components to be mounted based on the loaded data;

rearranging these components whose distance from a predetermined component is narrower than a predetermined value value, said distance being a narrow inter-compount distance, so that the components having a the narrow inter-component distance are arranged in ascending order of height;

checking whether all the components have been completed with the above operation; subjected to said rearranging; and

mounting the rearranged components according to said rearranged order.

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10. (Currently Amended) The component mounting method according to claim 8-~~or claim~~ 9, further comprising:

 checking whether there are any ~~lower~~ components having a height lower than all other components that should be mounted first when ~~the~~a distance of ~~the~~such components from neighboring components is narrower than a predetermined value;

 when there are components to be mounted, checking whether ~~the~~ mounting of the components that should be mounted first has been completed; and

 mounting ~~the~~such components on ~~the~~a printed circuit board.

11. (New) A component mounting apparatus for mounting components in ascending order of height, comprising:

 a control section for deciding an order of mounting components to be mounted, based on information relating to mounting positions and heights of such components to be mounted, so that such components are mounted in ascending order of height.

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12. (New) The component mounting apparatus of claim 11,
further comprising:

a classifier for classifying into at least one group
adjoining components spaced apart from each other at a
distance shorter than a predetermined value, wherein

said control section is for determining an order of
mounting components of each said group.

13. (New) The component mounting apparatus according to
claim 11, further comprising a data section containing
information relating to mounting positions and heights of the
components to be mounted.

14. (New) The component mounting apparatus according to
claim 12, further comprising a data section containing
information relating to mounting positions and heights of
components to be mounted.

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15. (New) The component mounting method according to
claim 9, further comprising:

 checking whether there are any components having a height
 lower than all other components that should be mounted first
 when a distance of such components from neighboring components
 is narrower than a predetermined value;

 when there are components to be mounted, checking whether
 mounting of components that should be mounted first has been
 completed; and

 mounting such components on a printed circuit board.